

### IN THE CLAIMS

Please amend claims 1, 16, and 27, as discussed below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### **Listing of Claims:**

Claim 1 (currently amended) A method for depositing a coating onto a substrate, said method comprising the introduction of an atomised coating forming material into an exciting medium, said exciting medium causing chemical activation of the atomised coating forming material prior to or prior to and during the material being deposited onto a substrate to form the coating thereon and characterised in that the exciting medium is pulsed.

Claim 2 (original) A method according to claim 1 characterised in that the pulsing of the excitation medium significantly retains the chemical properties of the atomised coating forming material.

Claim 3 (original) A method according to claim 1 characterised in that an atomizer is used to introduce the coating forming material with each atomizer having a monomer supply connected thereto.

Claim 4 (previously presented) A method according to claim 1 characterised in that the exciting medium is a pulsed plasma discharge selectively operated at atmospheric pressure.

Claim 5 (previously presented) A method according to claim 1 characterised in that the exciting medium is a pulsed plasma discharge selectively operated at less than atmospheric pressure

Claim 6 (original) A method according to claim 1 characterised in that at least one additional material is added into the atomised coating forming material.

Claim 7 (original) A method according to claim 6 characterised in that the additive material acts as a buffer to maintain the process pressure and/or carry the atomised forming material.

Claim 8 (previously presented) A method according to claim 6 characterised in that the additive material modifies and/or is incorporated into the atomised coating forming material and/or the resultant coating.

Claim 9 (original) A method according to claim 6 characterised in that the introduction of the additional materials to the atomised coating forming material is pulsed.

Claim 10 (original) A method according to claim 1 characterised in that the exciting medium is a pulsed plasma charge.

Claim 11 (original) A method according to claim 1 characterised in that the exciting medium is created by a pulsed flux of electromagnetic radiation.

Claim 12 (original) A method according to claim 1 characterised in that the exciting medium is created by a pulsed flux of ionised particles or radicals.

Claim 13 (original) A method according to claim 1 characterised in that the substrate to which the coating material is applied is located substantially inside the pulsed exciting medium during coating deposition.

Claim 14 (original) A method according to claim 1 characterised in that the substrate to which the coating material is applied is located outside of the pulsed exciting medium during coating deposition.

Claim 15 (previously presented) A method of producing a multi-layered material coating on a substrate characterised in that the substrate is repeatedly exposed to excited coating forming material produced in accordance with the method of claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14.

Claim 16 (currently amended) A method ~~according to claim 15 characterised in that~~  
of producing a multi-layered material coating on a substrate characterised in that the  
substrate is repeatedly exposed to excited coating forming material produced in  
accordance with the method of claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14,  
wherein the nature of the exciting medium is ~~are~~ changed during the coating  
formation.

Claim 17 (original) A method according to claim 15 characterised in that the coating  
formed on the substrate is post-treated by exposure to an exciting medium.

Claim 18 (original) A method according to claim 15 characterised in that the  
substrate is pre-treated prior to coating by exposure to the exciting medium prior to  
coating deposition.

Claim 19 (previously presented) A method according to claim 1 characterised in that  
the substrate is any of metal, glass, semiconductor, ceramic, polymer, woven or non-  
woven fibres, natural fibres, synthetic fibres, celluloaic material, or powder..

Claim 20 (previously presented) A method according to claim 1 characterised in that  
the coating forming material comprises an organic, organosilicon, organometallic, or  
inorganic material; or mixtures thereof.

Claim 21 (original) A method according to claim 1 characterised in that the atomised  
coating forming material is deposited via an ultrasonic nozzle supplied with coating  
forming material in the form of a liquid or liquid/solid slurry.

Claim 22 (original) A method according to claim 1 characterised in that the atomised  
coating forming material is deposited via a nebulizer supplied with coating forming  
material in the form of a liquid or liquid/solid slurry and a carrier gas.

Claim 23 (original) A method according to claim 1 characterised in that the atomised  
coating forming material is deposited via a plain-jet gas blast atomizer supplied with  
coating forming material in the form of a powder, and a carrier gas.

Claim 24 (original) A method according to claim 1 characterised in that a plurality of atomizers are used to supply coating forming material to the excitation medium.

Claim 25 (previously presented) A method according to claim 1 characterised in that the excitation medium is heated.

Claim 26 (original) A method according to claim 1 characterised in that the coated substrate is subject to derivatization.

Claim 27 (currently amended) A method for depositing a coating formed from a liquid coating forming material or a liquid mixed with substantially insoluble particles, ~~characterised in that said method comprises~~ comprising the steps of atomising the coating forming material and introducing it into a pulsed exciting medium to chemically activate the coating forming material that and facilitate[[s]] the formation of activated precursor species to the coating, these precursor species deposited onto a substrate, forming the ~~coating, wherein the exciting medium is pulsed to significantly retain the chemical properties of the atomised coating forming material.~~

Claim 28 (original) A method according to claim 27 characterised in that the liquid is an organic or organo-silicon monomer or oligomers.

Claim 29 (original) A method according to claim 27 characterised in that the precursor species are monomeric or oligomeric radicals and ions.

Claim 30 (original) A method according to claim 27 characterised in that the atomised coating forming material passes through an atomizer or nebulizer.

Claim 31 (original) A method according to claim 1 characterised in that the exciting medium contains the atomised coating forming material in the absence of other materials.

Claim 32 (withdrawn)